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(c) format only 2002 Dialog
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(c) 2009 Mass. Med. Soc.

Set Items Description

? E AU=GAZI T, EHUD?

Ref	Items	Index-term
E1	85	AU=GAZI T, E.
E2	209	AU=GAZI T, EHUD
E3	0	*AU=GAZI T, EHUD?
E4	1	AU=GAZI T, EHUT
E5	2	AU=GAZI T, EMANUEL
E6	39	AU=GAZI T, EPHRAI M
E7	1	AU=GAZI T, EPHRAYI M
E8	4	AU=GAZI T, G
E9	1	AU=GAZI T, G
E10	10	AU=GAZI T, GADI
E11	1	AU=GAZI T, H
E12	6	AU=GAZI T, H.

Enter P or PAGE for more

? S E1-E4

85 AU=GAZI T, E.
209 AU=GAZI T, EHUD
0 AU=GAZI T, EHUD?
1 AU=GAZI T, EHUT

S1 278 E1-E4

? S S1 AND TOXI N

278 S1
1070891 TOXI N

S2 42 S1 AND TOXI N

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? T S3/3, K/1-22

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3/3, K/1 (Item 1 from file: 24)

DIALOG(R) File 24: CSA Life Sciences Abstracts
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0003502673 I P ACCESSI ON NO: 8820610

Crystallization of Doc and the Phd-Doc toxin-antitoxin complex

Garcia-Pino, Abel; Dao-Thi, Minh-Hoa; Gazit, Ehud; Magnuson, Roy
David; Wyns, Lode; Loris, Remy
Laboratorium voor Ultrastructuur, Vrije Universiteit Brussel, Pleinlaan 2,
B-1050 Brussel, Belgium [mailto:agarcia@vub.ac.be]

Acta Crystallographica Section F, v 64, n 11, p 1034-1038, November 1, 2008
PUBLICATION DATE: 2008

Untitled

PUBLISHER: Blackwell Publishing Ltd., 9600 Garsington Road

DOCUMENT TYPE: Journal Article

RECORD TYPE: Abstract

LANGUAGE: English

SUMMARY LANGUAGE: English

ISSN: 1744-3091

FILE SEGMENT: Bacteriology Abstracts (Microbiology B)

Crystallization of Doc and the Phd-Doc toxin-antitoxin complex

Garcia-Pino, Abel; Dao-Thi, Minh-Hoa; Gazit, Ehud; Magnuson, Roy David; Wyns, Lode; Loris, Remy

ABSTRACT:

... its plasmidic form in *Escherichia coli* and is the archetype of a family of bacterial toxin-antitoxin modules. The His66Tyr mutant of Doc (Doc super(H66Y)) was crystallized in space group...

3/3, K/2 (Item 2 from file: 24)
DIALOG(R) File 24: CSA Life Sciences Abstracts
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0003013616 IP ACCESSION NO: 7288149

The yefM-yoeB Toxin-Antitoxin Systems of *Escherichia coli* and *Streptococcus pneumoniae*: Functional and Structural Correlation

Nieto, Concha; Cherny, Izack; Khoo, Seok Kooi; de Lacoba, Mario Garcia; Chan, Wai Ting; Yeo, Chew Chieng; Gazit, Ehud; Espinosa, Manuel
Centro de Investigaciones Biológicas, CSIC, Madrid, Spain. Department of Molecular Microbiology and Biotechnology, Tel Aviv University, Tel Aviv 69978, Israel. Department of Biotechnology, Malaysia University of Science and Technology, Petaling Jaya, Malaysia

Journal of Bacteriology, v 189, n 4, p 1266-1278, February 2007

PUBLICATION DATE: 2007

PUBLISHER: American Society for Microbiology, 1752 N Street N.W.
Washington, DC 20036 USA, [URL: <http://www.asm.org/>]

DOCUMENT TYPE: Journal Article

RECORD TYPE: Abstract

LANGUAGE: English

SUMMARY LANGUAGE: English

ISSN: 0021-9193

ELECTRONIC ISSN: 1098-5530

FILE SEGMENT: Bacteriology Abstracts (Microbiology B)

The yefM-yoeB Toxin-Antitoxin Systems of *Escherichia coli* and *Streptococcus pneumoniae*: Functional and Structural Correlation

... Cherny, Izack; Khoo, Seok Kooi; de Lacoba, Mario Garcia; Chan, Wai Ting; Yeo, Chew Chieng; Gazit, Ehud; Espinosa, Manuel

ABSTRACT:

Toxin-antitoxin loci belonging to the yefM-yoeB family are located in the chromosome or in...

... locus of *Streptococcus pneumoniae*, and these genes encode bona fide antitoxin (YefM sub(Spn)) and toxin (YoeB sub(Spn)) products. We

Untitled

showed that overproduction of YoeB sub(Spn) is toxic to...

...homologous, whereas the antitoxins appeared to be specifically designed for each bacterial locus; thus, the toxin-antitoxin interactions were adapted to the different bacterial environmental conditions. Both structural features, folding and...

3/3, K/3 (Item 3 from file: 24)
DIALOG(R) File 24: CSA Life Sciences Abstracts
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0002893868 IP ACCESSION NO: 6517911
The YoeB Toxin Is a Folded Protein That Forms a Physical Complex with the Unfolded YefM Antitoxin: Implications for a structural-based differential stability of toxin-antitoxin systems

Cherny, Izhack; Rockah, Liat; Gazit, Ehud
Department of Molecular Microbiology and Biotechnology, George S. Wise
Faculty of Life Sciences, Tel Aviv University, Tel Aviv 69978, Israel

Journal of Biological Chemistry, v 280, n 34, p 30063-30072, August 2005
PUBLICATION DATE: 2005

PUBLISHER: American Society for Biochemistry and Molecular Biology, 9650
Rockville Pike Bethesda MD 20814-3996 USA, [mailto:asbmb@asbmb.faseb.org],
[URL: http://www.jbc.org]

DOCUMENT TYPE: Journal Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English
ISSN: 0021-9258
ELECTRONIC ISSN: 1083-351X
FILE SEGMENT: Bacteriology Abstracts (Microbiology B); Genetics Abstracts

The YoeB Toxin Is a Folded Protein That Forms a Physical Complex with the Unfolded YefM Antitoxin: Implications for a structural-based differential stability of toxin-antitoxin systems

Cherny, Izhack; Rockah, Liat; Gazit, Ehud

ABSTRACT:

The chromosomal YoeB-YefM toxin-antitoxin module common to numerous strains of bacteria is presumed to have a significant role...

...protein, as we previously reported for the Phd antitoxin in the P1 phage Doc-Phd toxin-antitoxin system. Here we report the purification and structural properties of the YoeB toxin and present physical evidence for the existence of a tight YoeB-YefM polypeptide complex in...

...physical complex between the proteins. Near- and far-UV circular dichroism spectroscopy of the purified toxin revealed that, similar to the Doc toxin, YoeB is a well-folded protein. Thermal denaturation experiments confirmed the conformational stability of the YoeB toxin, which underwent reversible thermal unfolding at temperatures up to 56 degree C. The thermodynamic features of the toxin-antitoxin complex were similar. Taken together, our results support the notion of a correlation between differential physiological and structural stability in toxin-antitoxin modules.

IDENTIFIERS: YoeB toxin; YoeM toxin

Untitled

3/3, K/4 (Item 1 from file: 50)
DI ALOG(R) File 50: CAB Abstracts
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0008636224 CAB Accession Number: 20043072465

The role of *Bacillus thuringiensis* Cry1C and Cry1E separate structural domains in the interaction with *Spodoptera littoralis* gut epithelial cells.

Avisar, D.; Keller, M.; Gazit, E.; Prudovsky, E.; Sneh, B.; Zilberstein, A.

Author email address: avia@post.tau.ac.il
Department of Plant Sciences, George S. Wise Faculty of Life Sciences,
Tel Aviv University, Tel Aviv 69978, Israel.

Journal of Biological Chemistry vol. 279 (16): p. 15779-15786

Publication Year: 2004

ISSN: 0021-9258

Digital Object Identifier: 10.1074/jbc.M312597200

Publisher: American Society for Biochemistry and Molecular Biology Inc
Bethesda, USA

Language: English

Record Type: Abstract

Document Type: Journal article

... and lower K_{SUB} d than Cry1C domain II and further supported the existence of toxin multisite interactions. Competitive binding assays were used to estimate the sequence of interaction events. Cry1C...

... three domains specifically interact with the epithelial cell membrane. The folding of the three-domain toxin probably dictates the sequence of interaction events.

Avisar, D.; Keller, M.; Gazit, E.; Prudovsky, E.; Sneh, B.; Zilberstein, A.

3/3, K/5 (Item 2 from file: 50)
DI ALOG(R) File 50: CAB Abstracts
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0007654000 CAB Accession Number: 19981112254

The structure and organization within the membrane of the helices composing the pore-forming domain of *Bacillus thuringiensis* delta-endotoxin are consistent with an "umbrella-like" structure of the pore.

Gazit, E.; Rocca, P. Ia; Sansom, M. S. P.; Shai, Y.
Department of Biological Chemistry, Weizmann Institute of Science,
Rehovot, 76100, Israel.

Proceedings of the National Academy of Sciences of the United States of America vol. 95 (21): p. 12289-12294

Publication Year: 1998

ISSN: 0027-8424

Language: English

Record Type: Abstract

Document Type: Journal article

... The relative affinities for membranes of peptides corresponding to the seven helices that compose the toxin pore-forming domain, their modes of membrane interaction, their structures within membranes, and their orientations...

Gazit, E.; Rocca, P. Ia; Sansom, M. S. P.; Shai, Y.

Untitled

3/3, K/6 (Item 3 from file: 50)
DIALOG(R) File 50: CAB Abstracts
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0007590985 CAB Accession Number: 19980504640

Bacillus thuringiensis cytolytic toxin associates specifically with its synthetic helices A and C in the membrane bound state. Implications for the assembly of oligomeric transmembrane pores.

Gazit, E.; Burshtein, N.; Ellar, D. J.; Sawyer, T.; Shai, Y.

Department of Membrane Research and Biophysics, Weizmann Institute of Science, Rehovot 76100, Israel.

Biochemistry (Washington) vol. 36 (49): p. 15546-15554

Publication Year: 1997

ISSN: 0006-2960

Language: English

Record Type: Abstract

Document Type: Journal article

Bacillus thuringiensis cytolytic toxin associates specifically with its synthetic helices A and C in the membrane bound state. Implications...

... corresponding to beta5, beta6, and beta7 strands, to a conserved nonhelical region of the OytA toxin of *B. thuringiensis* subsp. *israeliensis* (P SUP 149-170), to helices B and D, and...

... 149-170 and helix D bind the membrane weakly. Membrane permeation experiments suggested that OytA toxin exerts its activity by aggregation of several monomers. To learn about the structural elements that...

... the membrane. Taken together, these results provide further support for the suggestion that the OytA toxin self-assembles within membrane and that helices A and C are major structural elements involved in the membrane interaction and intermolecular assembly of the toxin.

Gazit, E.; Burshtein, N.; Ellar, D. J.; Sawyer, T.; Shai, Y.

3/3, K/7 (Item 4 from file: 50)
DIALOG(R) File 50: CAB Abstracts
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0006949830 CAB Accession Number: 19950500311

Structural characterization, membrane interaction, and specific antibody assembly within phospholipid membranes of hydrophobic segments from *Bacillus thuringiensis* var. *israeliensis* cytolytic toxin.

Gazit, E.; Shai, Y.

Department of Membrane Research and Biophysics, Weizmann Institute of Science, Rehovot 76100, Israel.

Biochemistry (Washington) vol. 32 (46): p. 12363-12371

Publication Year: 1993

ISSN: 0006-2960

Language: English

Record Type: Abstract

Document Type: Journal article

... specific antibody assembly within phospholipid membranes of hydrophobic segments from *Bacillus thuringiensis* var. *israeliensis* cytolytic toxin.

Untitled

The *B. thuringiensis* subsp. *israelensis* (Bti) cytolytic toxin is hypothesized to exert its toxic activity via pore formation in the cell membrane as a result of the aggregation of several monomers. To gain insight into the toxin's mode of action, 2 putative hydrophobic 22 amino acid peptides were synthesized and characterized...

...helix-2), and the other 20 amino acids 50-71 (termed helix-1) of the toxin. Circular dichroism spectroscopy revealed that both segments adopt high alpha-helical content in the hydrophobic...

...for helices-1 and -2 in the assembly and in the pore formation by Bti toxin.

Gazit, E.; Shai, Y.

3/3, K/8 (Item 1 from file: 98)
DI ALOG(R) File 98: General Sci Abs
(c) 2009 The HW Wilson Co. All rts. reserv.

03808148 H. W. WILSON RECORD NUMBER: BGS198058148
The structure and organization within the membrane of the helices composing the pore-forming domain of *Bacillus thuringiensis* d-endotoxin are consistent with an "umbrella-like" structure of the pore.

Gazit, Ehud

La Rocca, Paolo; Sansom, Mark S. P
Proceedings of the National Academy of Sciences of the United States of America (Proc Natl Acad Sci U S A) v. 95 no21 (Oct. 13 '98) p. 12289-94
SPECIAL FEATURES: bibl il ISSN: 0027-8424

LANGUAGE: English

COUNTRY OF PUBLICATION: United States

Gazit, Ehud

...ABSTRACT: the results suggest an "umbrella" model for the structure of the pores formed by the toxin. The findings also support previous suggestions that the $\alpha 7$ helix may function as the binding...

DESCRIPTORS:

Bacillus thuringiensis toxin; Membrane fusion

3/3, K/9 (Item 2 from file: 98)
DI ALOG(R) File 98: General Sci Abs
(c) 2009 The HW Wilson Co. All rts. reserv.

02754244 H. W. WILSON RECORD NUMBER: BGS194004244
Structural characterization, membrane interaction, and specific assembly within phospholipid membranes of hydrophobic segments from *Bacillus thuringiensis* var. *israelensis* cytolytic toxin.

Gazit, Ehud

Shai, Yechiel

Biochemistry (American Chemical Society) (Biochemistry) v. 32 (Nov. 23 '93) p. 12363-71

DOCUMENT TYPE: Feature Article

SPECIAL FEATURES: bibl il ISSN: 0006-2960

LANGUAGE: English

COUNTRY OF PUBLICATION: United States

...and specific assembly within phospholipid membranes of hydrophobic segments from *Bacillus thuringiensis* var. *israelensis* cytolytic toxin.

Gazit, Ehud

Untitled

ABSTRACT: The *Bacillus thuringiensis* var. *israelensis* (Bti) cytolytic toxin is hypothesized to exert its toxic activity via pore formation in the cell membrane as a result of the aggregation of several monomers. To gain insight into the toxin's mode of action, 2 putative hydrophobic 22 amino acid peptides were synthesized and characterized...

...Ellar, D. J., & Chilcott, C. N. (1988) *J. Mol. Biol.* 202, 527-535} of the toxin. Circular dichroism spectroscopy revealed that both segments adopt high α -helical content in a hydrophobic...

...for helices-1 and -2 in the assembly and in the pore formation by Bti toxin. Copyright 1993, American Chemical Society. .

DESCRIPTORS:

Bacillus thuringiensis toxin; Membranes (Biology...

3/3, K/10 (Item 3 from file: 98)
DIALOG(R) File 98: General Sci Abs
(c) 2009 The HW Wilson Co. All rts. reserv.

02514029 H.W. WILSON RECORD NUMBER: BGS193014029
Structural and functional characterization of the $\alpha 5$ segment of *Bacillus thuringiensis* d-endotoxin.

Gazit, Ehud
Shai, Yechiel
Biochemistry (American Chemical Society) (Biochemistry) v. 32 (Apr. 6 '93)
p. 3429-36

DOCUMENT TYPE: Feature Article
SPECIAL FEATURES: bibli ISSN: 0006-2960
LANGUAGE: English
COUNTRY OF PUBLICATION: United States

Gazit, Ehud

DESCRIPTORS:

Bacillus thuringiensis toxin; Proteins...

3/3, K/11 (Item 1 from file: 143)
DIALOG(R) File 143: Biol. & Agric. Index
(c) 2009 The HW Wilson Co. All rts. reserv.

1068609 H.W. WILSON RECORD NUMBER: BBA199041346
The Doc toxin and Phd antidote proteins of the bacteriophage P1 plasmid addition system form a heterotrimeric complex

Gazit, Ehud
Sauer, Robert T
The Journal of Biological Chemistry v. 274 no24 (June 11 1999) p. 16813-18
DOCUMENT TYPE: Feature Article ISSN: 0021-9258

The Doc toxin and Phd antidote proteins of the bacteriophage P1 plasmid addition system form a heterotrimeric complex
Gazit, Ehud

3/3, K/12 (Item 1 from file: 399)
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147516306 CA: 147(25)516306m JOURNAL
Structural and Thermodynamic Characterization of the *Escherichia coli*
Page 8

Untitled

Rel BE Toxin-Antitoxin System Indication for a Functional Role of
Differential Stability

AUTHOR(S): Cherny, Izhack; Overgaard, Martin; Borch, Jonas; Bram, Yaron;
Gerdes, Kenn; Gazit, Ehud

LOCATION: Department of Molecular Microbiology and Biotechnology, George
S. Wise Faculty of Life Sciences, Tel Aviv University, 69978, Tel
Aviv-Jaffa, Israel

JOURNAL: Biochemistry (Biochemistry) DATE: 2007 VOLUME: 46 NUMBER: 43

PAGES: 12152-12163 CODEN: BICHAW ISSN: 0006-2960

PUBLISHER ITEM IDENTIFIER: 0006-2960(70)01037-1 LANGUAGE: English

PUBLISHER: American Chemical Society

3/3, K/13 (Item 2 from file: 399)

DIALOG(R) File 399: CA SEARCH(R)

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147482564 CA: 147(23)482564b CONFERENCE PROCEEDING

Bacterial toxin-antitoxin systems as targets for the development of novel
antibiotics

AUTHOR(S): Alonso, Juan C.; Balsa, Dolores; Cherny, Izhack; Christensen,
Susanne K.; Espinosa, Manuel; Francuski, Djordje; Gazit, Ehud; Gerdes, Kenn
; Hitchin, Ed; Martin, M Teresa; Nieto, Concepcion; Overweg, Karin;
Pellicer, Teresa; Saenger, Wolfram; Velfle, Heinz; Velfle, Karin; Wells,
Jerry

LOCATION: Department of Microbial Biotechnology, Centro Nacional de
Biotechnology, CSIC, Madrid, Spain, 28049

JOURNAL: Enzyme-Mediated Resist. Antibiot. (Enzyme-Mediated Resistance to
Antibiotics) EDITOR: Bonomo, Robert A. (Ed), Tolmasky, Marcelo (Ed),

DATE: 2007 PAGES: 313-329 CODEN: 69JIO6 LANGUAGE: English PUBLISHER:
American Society for Microbiology, Washington, D. C

3/3, K/14 (Item 3 from file: 399)

DIALOG(R) File 399: CA SEARCH(R)

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142367629 CA: 142(20)367629m PATENT

Antibacterial agents disrupting toxin-antitoxin binding and methods of
identifying and utilizing such agents

INVENTOR(AUTHOR): Gazit, Ehud; Cherny, Izhack

LOCATION: Israel

ASSIGNEE: Ramot at Tel Aviv University Ltd.

PATENT: PCT International ; WO 200531362 A2 DATE: 20050407

APPLICATION: WO 2004/L898 (20040927) *US 2003PV507488 (20031002) *US
2004PV550334 (20040308)

PAGES: 108 pp. CODEN: PIXD2 LANGUAGE: English

PATENT CLASSIFICATIONS:

CLASS: G01N-033/68A

DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BW; BY;
BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; EG; ES; FI; GB; GD;
GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS;
LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NA; NI; NO; NZ; OM; PG; PH; PL;
PT; RO; RU; SC; SD; SE; SG; SK; SL; SY; TJ; TM; TN; TR; TT; TZ; UA; UG; US;
UZ; VC; VN; YU; ZA; ZM; ZW DESIGNATED REGIONAL: BW; GH; GM; KE; LS; MW; MZ;
; NA; SD; SL; SZ; TZ; UG; ZM; ZW AM; AZ; BY; KG; KZ; MD; RU; TJ; TM; AT;
BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL;
PL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR;
NE; SN; TD; TG

3/3, K/15 (Item 4 from file: 399)

DIALOG(R) File 399: CA SEARCH(R)

Untitled

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140334320 CA: 140(21)334320j JOURNAL

The YefM Antitoxin Defines a Family of Natively Unfolded Proteins:
Implications as a Novel Antibacterial Target

AUTHOR(S): Cherny, Izchack; Gazit, Ehud

LOCATION: George S. Wise Faculty of Life Sciences, Department of
Molecular Microbiology and Biotechnology, Tel-Aviv University, 69978,
Tel-Aviv, Israel

JOURNAL: J. Biol. Chem. (Journal of Biological Chemistry) DATE: 2004

VOLUME: 279 NUMBER: 9 PAGES: 8252-8261 CODEN: JBCHA3 ISSN: 0021-9258

LANGUAGE: English PUBLISHER: American Society for Biochemistry and
Molecular Biology

3/3, K/16 (Item 5 from file: 399)

DIALOG(R) File 399: CA SEARCH(R)

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130048562 CA: 130(5)48562q JOURNAL

The structure and organization within the membrane of the helices
composing the pore-forming domain of *Bacillus thuringiensis*
.delta.-endotoxin are consistent with an "umbrella-like" structure of the
pore

AUTHOR(S): Gazit, Ehud; La Rocca, Paolo; Sansom, Mark S. P.; Shai,
Yechiel

LOCATION: Department of Biological Chemistry, Weizmann Institute of
Science, 76100, Rehovot, Israel

JOURNAL: Proc. Natl. Acad. Sci. U. S. A. DATE: 1998 VOLUME: 95

NUMBER: 21 PAGES: 12289-12294 CODEN: PNASA6 ISSN: 0027-8424

LANGUAGE: English PUBLISHER: National Academy of Sciences

3/3, K/17 (Item 6 from file: 399)

DIALOG(R) File 399: CA SEARCH(R)

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128044828 CA: 128(5)44828s JOURNAL

Bacillus thuringiensis Cytolytic Toxin Associates Specifically with Its
Synthetic Helices A and C in the Membrane Bound State. Implications for
the Assembly of Oligomeric Transmembrane Pores

AUTHOR(S): Gazit, Ehud; Burshtein, Noga; Ellar, David J.; Sawyer, Trevor;
Shai, Yechiel

LOCATION: Department of Membrane Research and Biophysics, Weizmann
Institute of Science, 76100, Rehovot, Israel

JOURNAL: Biochemistry DATE: 1997 VOLUME: 36 NUMBER: 49 PAGES:
15546-15554 CODEN: BICHAW ISSN: 0006-2960 PUBLISHER ITEM IDENTIFIER:
0006-2960(97)00758-7 LANGUAGE: English PUBLISHER: American Chemical
Society

3/3, K/18 (Item 7 from file: 399)

DIALOG(R) File 399: CA SEARCH(R)

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123027507 CA: 123(3)27507r CONFERENCE PROCEEDING

Membrane interaction and hemolytic activity of the .alpha.5 helix of
.delta.-endotoxin

AUTHOR(S): Gazit, Ehud; Shai, Yechiel

LOCATION: Department Membrane Research and Biophysics, Weizmann Institute
Science Rehovot, 76100, Israel

JOURNAL: Recent Adv. Mol. Biochem. Res. Proteins, Proc. IUBMB Symp.
Protein Struct. Funct. EDITOR: Wei, Yau-huei (Ed), Chen, Ching-san (Ed),

Untitled
Su, Jong-ching (Ed), DATE: 1993 PAGES: 145-53 CODEN: 61HNAL LANGUAGE:
English MEETING DATE: 920000 PUBLISHER: World Sci., Singapore, Singapore

3/3, K/19 (Item 8 from file: 399)
DI ALOG(R) File 399: CA SEARCH(R)
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122003545 CA: 122(1)3545e JOURNAL
The .alpha.-5 segment of *Bacillus thuringiensis* .delta.-endotoxin: in
vitro activity, ion channel formation and molecular modeling
AUTHOR(S): Gazit, Ehud; Bach, Diana; Kerr, Ian D.; Sansom, Mark S. P.;
Chejanovsky, Nor; Shai, Yechiel
LOCATION: Dep. Membrane Res. Biophys., Weizmann Inst. Sci., 76100,
Rehovot, Israel
JOURNAL: Biochem J. DATE: 1994 VOLUME: 304 NUMBER: 3 PAGES: 895-902
CODEN: BIJOAK ISSN: 0264-6021 LANGUAGE: English

3/3, K/20 (Item 9 from file: 399)
DI ALOG(R) File 399: CA SEARCH(R)
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118163181 CA: 118(17)163181d JOURNAL
Structural and functional characterization of the .alpha.5 segment of
Bacillus thuringiensis .delta.-endotoxin
AUTHOR(S): Gazit, Ehud; Shai, Yechiel
LOCATION: Dep. of Membrane Res. Biophys., Weizmann Inst. Sci., 76100,
Rehovot, Israel
JOURNAL: Biochemistry DATE: 1993 VOLUME: 32 NUMBER: 13 PAGES: 3429-36
CODEN: BICHAW ISSN: 0006-2960 LANGUAGE: English

3/3, K/21 (Item 1 from file: 185)
DI ALOG(R) File 185: Zoological Record Online(R)
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04966596 BIOSIS No. 14008048631
The role of *Bacillus thuringiensis* Cry1C and Cry1E separate structural
domains in the interaction with *Spodoptera littoralis* gut epithelial cells.
AUTHORS: Avisar, Dror; Keller, Menahem; Gazit, Ehud; Prudovsky,
Evgenia; Sneh, Baruch; Zilberstein, Aviah (a)
AUTHORS ADDRESS: (a) Tel Aviv Univ, George S Wise Fac Life Sci, IL-69978
Tel Aviv; Israel aviah@post.tau.ac.il
SOURCE: Journal of Biological Chemistry 279(16), April 16 2004:
15779-15786. [Print]
DOCUMENT TYPE: Article
ISSN: 0021-9258
LANGUAGES: English SUMMARY LANGUAGES: English
RECORD TYPE: Abstract

AUTHORS: Avisar, Dror; Keller, Menahem; Gazit, Ehud; Prudovsky,
Evgenia; Sneh, Baruch; Zilberstein, Aviah...

... ABSTRACT: higher B_{max} and lower K_d than Cry1C domain II and further
supported the existence of toxin multisite interactions.
Competitive binding assays were used to estimate the sequence of
interaction events. Cry1C...

... three domains specifically interact with the epithelial cell membrane.
The folding of the three-domain toxin probably dictates the
sequence of interaction events.

Untitled

3/3, K/22 (Item 1 from file: 149)
DI ALOG(R) File 149: TGG Health & Wellness DB(SM)
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03335715 SUPPLIER NUMBER: 163707106 (USE FORMAT 7 OR 9 FOR FULL TEXT)

The yefM-yoeB toxin-antitoxin systems of Escherichia coli and Streptococcus pneumoniae: functional and structural correlation. (Author abstract)

Nieto, Concha; Cherny, Izack; Khoo, Seok Kooi; de Lacoba, Mario Garcia; Chan, Wei Ting; Yeo, Chew Chieng; Gazit, Ehud; Espinosa, Manuel
Journal of Bacteriology, 189, 3-4, 1266(13)
Feb, 2007

DOCUMENT TYPE: Author abstract PUBLICATION FORMAT: Magazine/Journal
ISSN: 0021-9193 LANGUAGE: English RECORD TYPE: Abstract
TARGET AUDIENCE: Academic

The yefM-yoeB toxin-antitoxin systems of Escherichia coli and Streptococcus pneumoniae: functional and structural correlation. (Author abstract)
... Gazit, Ehud

AUTHOR ABSTRACT: Toxin-antitoxin loci belonging to the yefM-yoeB family are located in the chromosome or in...
... of Streptococcus pneumoniae, and these genes encode bona fide antitoxin (Yef(M sub. Spn)) and toxin (Yoe(B sub. Spn)) products. We showed that overproduction of Yoe(B sub. Spn),, is...

... homologous, whereas the antitoxins appeared to be specifically designed for each bacterial locus; thus, the toxin-antitoxin interactions were adapted to the different bacterial environmental conditions. Both structural features, folding and...
? E AU=CHERNY, IZHACK?

Ref	Items	Index-term
E1	1	AU=CHERNY, I V
E2	27	AU=CHERNY, IZHACK
E3	0	*AU=CHERNY, IZHACK?
E4	1	AU=CHERNY, J
E5	8	AU=CHERNY, J. J.
E6	1	AU=CHERNY, J. V.
E7	1	AU=CHERNY, JULIUS
E8	1	AU=CHERNY, L
E9	10	AU=CHERNY, L.
E10	3	AU=CHERNY, LILY
E11	2	AU=CHERNY, LYNN
E12	1	AU=CHERNY, LYNN M

Enter P or PAGE for more

? S E1-E2

1	AU=CHERNY, I V
27	AU=CHERNY, IZHACK
28	E1-E2

S4

? S S4 AND TOXIN

28	S4
1070891	TOXIN
21	S4 AND TOXIN

S5

? RD

>>>Duplicate detection is not supported for File 393.

Untitled

>>>Duplicate detection is not supported for File 391.

>>>Records from unsupported files will be retained in the RD set.

S6 7 RD (unique items)

? T S6/3, K/1-7

>>>KW C option is not available in file(s): 399

6/3, K/1 (Item 1 from file: 24)

DIALOG(R) File 24: CSA Life Sciences Abstracts

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0003013616 IP ACCESSION NO: 7288149

The yefM-yoeB Toxin-Antitoxin Systems of *Escherichia coli* and
Streptococcus pneumoniae: Functional and Structural Correlation

Nieto, Concha; Cherny, Izhack; Khoo, Seok Kooi; de Lacoba, Mario
Garcia; Chan, Wei Ting; Yeo, Chew Chi eng; Gazit, Ehud; Espinosa, Manuel
Centro de Investigaciones Biológicas, CSIC, Madrid, Spain. Department of
Molecular Microbiology and Biotechnology, Tel Aviv University, Tel Aviv
69978, Israel. Department of Biotechnology, Malaysia University of Science
and Technology, Petaling Jaya, Malaysia

Journal of Bacteriology, v 189, n 4, p 1266-1278, February 2007

PUBLICATION DATE: 2007

PUBLISHER: American Society for Microbiology, 1752 N Street N.W.
Washington, DC 20036 USA, [URL: <http://www.asm.org/>]

DOCUMENT TYPE: Journal Article

RECORD TYPE: Abstract

LANGUAGE: English

SUMMARY LANGUAGE: English

ISSN: 0021-9193

ELECTRONIC ISSN: 1098-5530

FILE SEGMENT: Bacteriology Abstracts (Microbiology B)

The yefM-yoeB Toxin-Antitoxin Systems of *Escherichia coli* and
Streptococcus pneumoniae: Functional and Structural Correlation

Nieto, Concha; Cherny, Izhack; Khoo, Seok Kooi; de Lacoba, Mario
Garcia; Chan, Wei Ting; Yeo, Chew Chi eng; Gazit...

ABSTRACT:

Toxin-antitoxin loci belonging to the yefM-yoeB family are located
in the chromosome or in...

...locus of *Streptococcus pneumoniae*, and these genes encode bona fide
antitoxin (YefM sub(Spn)) and toxin (YoeB sub(Spn)) products. We
showed that overproduction of YoeB sub(Spn) is toxic to...

...homologous, whereas the antitoxins appeared to be specifically designed
for each bacterial locus; thus, the toxin-antitoxin interactions were
adapted to the different bacterial environmental conditions. Both
structural features, folding and...

6/3, K/2 (Item 2 from file: 24)

DIALOG(R) File 24: CSA Life Sciences Abstracts

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0002893868 IP ACCESSION NO: 6517911

The YoeB Toxin Is a Folded Protein That Forms a Physical Complex with

Untitled
the Unfolded YefM Antitoxin: Implications for a structural-based
differential stability of toxin-antitoxin systems

Cherny, Izhack; Rockah, Liat; Gazit, Ehud
Department of Molecular Microbiology and Biotechnology, George S. Wise
Faculty of Life Sciences, Tel Aviv University, Tel Aviv 69978, Israel

Journal of Biological Chemistry, v 280, n 34, p 30063-30072, August 2005
PUBLICATION DATE: 2005

PUBLISHER: American Society for Biochemistry and Molecular Biology, 9650
Rockville Pike Bethesda MD 20814-3996 USA, [mailto:asbmb@asbmb.faseb.org],
[URL: http://www.jbc.org]

DOCUMENT TYPE: Journal Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English
ISSN: 0021-9258
ELECTRONIC ISSN: 1083-351X
FILE SEGMENT: Bacteriology Abstracts (Microbiology B); Genetics Abstracts

The YoeB Toxin Is a Folded Protein That Forms a Physical Complex with
the Unfolded YefM Antitoxin: Implications for a structural-based
differential stability of toxin-antitoxin systems

Cherny, Izhack; Rockah, Liat; Gazit, Ehud

ABSTRACT:

The chromosomal YoeB-YefM toxin-antitoxin module common to numerous
strains of bacteria is presumed to have a significant role...

...protein, as we previously reported for the Phd antitoxin in the P1 phage
Doc-Phd toxin-antitoxin system. Here we report the purification and
structural properties of the YoeB toxin and present physical evidence
for the existence of a tight YoeB-YefM polypeptide complex in...

...physical complex between the proteins. Near- and far-UV circular
dichroism spectroscopy of the purified toxin revealed that, similar
to the Doc toxin, YoeB is a well-folded protein. Thermal denaturation
experiments confirmed the conformational stability of the YoeB toxin,
which underwent reversible thermal unfolding at temperatures up to 56
degree C. The thermodynamic features of the toxin-antitoxin complex
were similar. Taken together, our results support the notion of a
correlation between differential physiological and structural stability in
toxin-antitoxin modules.

IDENTIFIERS: YoeB toxin; YoeM toxin

6/3, K/3 (Item 1 from file: 98)
DIALOG(R) File 98: General Sci Abs
(c) 2009 The H.W. Wilson Co. All rights reserved.

6009748 H. W. WILSON RECORD NUMBER: BGSA07151710
Structural and Thermodynamic Characterization of the Escherichia coli RelBE
Toxin-Antitoxin System: Indication for a Functional Role of
Differential Stability
Cherny, Izhack
Overgaard, Martin; Borch, Jonas
Biochemistry (American Chemical Society) v. 46 no43 (October 30 2007) p.
12152-63

Untitled

DOCUMENT TYPE: Feature Article

SPECIAL FEATURES: Bibliographic Footnote Graph Illustration Table ISSN: 0006-2960

LANGUAGE: English

COUNTRY OF PUBLICATION: United States

Structural and Thermodynamic Characterization of the Escherichia coli RelBE
Toxin-Antitoxin System Indication for a Functional Role of
Differential Stability
Cherny, Izhack

6/3, K/4 (Item 1 from file: 399)

DIALOG(R) File 399: CA SEARCH(R)

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147482564 CA: 147(23)482564b CONFERENCE PROCEEDING

Bacterial toxin-antitoxin systems as targets for the development of novel
antibiotics

AUTHOR(S): Alonso, Juan C.; Balsa, Dolores; Cherny, Izhack; Christensen,
Susanne K.; Espinosa, Manuel; Francuski, Djordje; Gazit, Ehud; Gerdes, Kenn
; Hitchin, Ed; Martin, M Teresa; Nieto, Concepcion; Overweg, Karin;
Pellicer, Teresa; Saenger, Wolfram Velfle, Heinz; Velfle, Karin; Wells,
Jerry

LOCATION: Department of Microbial Biotechnology, Centro Nacional de
Biotechnology, CSIC, Madrid, Spain, 28049

JOURNAL: Enzyme-Mediated Resist. Antibiot. (Enzyme-Mediated Resistance to
Antibiotics) EDITOR: Bonomo, Robert A. (Ed), Tolmasky, Marcelo (Ed),

DATE: 2007 PAGES: 313-329 CODEN: 69JIO6 LANGUAGE: English PUBLISHER:
American Society for Microbiology, Washington, D. C

6/3, K/5 (Item 2 from file: 399)

DIALOG(R) File 399: CA SEARCH(R)

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142367629 CA: 142(20)367629m PATENT

Antibacterial agents disrupting toxin-antitoxin binding and methods of
identifying and utilizing such agents

INVENTOR(AUTHOR): Gazit, Ehud; Cherny, Izhack

LOCATION: Israel

ASSIGNEE: Ramot at Tel Aviv University Ltd.

PATENT: PCT International ; WO 200531362 A2 DATE: 20050407

APPLICATI ON: WO 2004/L898 (20040927) *US 2003PV507488 (20031002) *US
2004PV550334 (20040308)

PAGES: 108 pp. CODEN: PIXXD2 LANGUAGE: English

PATENT CLASSIFICATIONS:

CLASS: G01N-033/68A

DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BW; BY;
BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; EG; ES; FI; GB; GD;
GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS;
LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NA; NI; NO; NZ; OM; PG; PH; PL;
PT; RO; RU; SC; SD; SE; SG; SK; SL; SY; TJ; TM; TN; TR; TT; TZ; UA; UG; US;
UZ; VC; VN; YU; ZA; ZM; ZW DESIGNATED REGIONAL: BW; GH; GM; KE; LS; MW; MZ
; NA; SD; SL; SZ; TZ; UG; ZM; ZW AM; AZ; BY; KG; KZ; MD; RU; TJ; TM; AT;
BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL;
PL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR;
NE; SN; TD; TG

6/3, K/6 (Item 3 from file: 399)

DIALOG(R) File 399: CA SEARCH(R)

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Untitled

140334320 CA: 140(21)334320j JOURNAL
The YefM Antitoxin Defines a Family of Natively Unfolded Proteins:
Implications as a Novel Antibacterial Target
AUTHOR(S): Cherny, Izhack; Gazit, Ehud
LOCATION: George S. Wise Faculty of Life Sciences, Department of
Molecular Microbiology and Biotechnology, Tel-Aviv University, 69978,
Tel-Aviv, Israel
JOURNAL: J. Biol. Chem (Journal of Biological Chemistry) DATE: 2004
VOLUME: 279 NUMBER: 9 PAGES: 8252-8261 CODEN: JBCHA3 ISSN: 0021-9258
LANGUAGE: English PUBLISHER: American Society for Biochemistry and
Molecular Biology

6/3, K/7 (Item 1 from file: 149)
DI ALOG(R) File 149: TGG Health & Wellness DB(SM)
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03335715 SUPPLIER NUMBER: 163707106 (USE FORMAT 7 OR 9 FOR FULL TEXT
)
The yefM-yoeB toxin-antitoxin systems of Escherichia coli and
Streptococcus pneumoniae: functional and structural correlation. (Author
abstract)
Ni eto, Concha; Cherny, Izhack; Khoo, Seok Kooi; de Lacoba, Mario
Garcia; Chan, Wei Ting; Yeo, Chew Chi eng; Gazit, Ehud; Espinosa, Manuel
Journal of Bacteriology, 189, 3-4, 1266(13)
Feb,
2007
DOCUMENT TYPE: Author abstract PUBLICATION FORMAT: Magazine/ Journal
ISSN: 0021-9193 LANGUAGE: English RECORD TYPE: Abstract
TARGET AUDIENCE: Academic

The yefM-yoeB toxin-antitoxin systems of Escherichia coli and
Streptococcus pneumoniae: functional and structural correlation. (Author
abstract)
... Cherny, Izhack

AUTHOR ABSTRACT: Toxin-antitoxin loci belonging to the yefM-yoeB
family are located in the chromosome or in...
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(Yef(M sub. Spn)) and toxin (Yoe(B. sub. Spn)) products. We showed that
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... homologous, whereas the antitoxins appeared to be specifically designed
for each bacterial locus; thus, the toxin-antitoxin interactions were
adapted to the different bacterial environmental conditions. Both
structural features, folding and...
? DS

Set	Items	Description
S1	278	E1-E4
S2	42	S1 AND TOXIN
S3	22	RD (unique items)
S4	28	E1-E2
S5	21	S4 AND TOXIN
S6	7	RD (unique items)